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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,933	12/23/2003	Koichi Miyachi	12480-000032/US	7380

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HARNES, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER

BODDIE, WILLIAM

ART UNIT	PAPER NUMBER
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2629

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/742,933	Applicant(s) MIYACHI ET AL.	
	Examiner William L. Boddie	Art Unit 2629	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 21 March 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-7 and 9-19.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

Continuation of 11. does NOT place the application in condition for allowance because: the arguments presented by the Applicants have been fully considered but are not seen as persuasive.

On pages 15-16, the Applicants traverse the rejection of claim 1 on the grounds that Usui does not teach the newly incorporated limitations as previously set forth in claim 8. Specifically, the Applicants argue that there is no connection between pulse width modulation and the comparison functionality of Usui. It is further argued that minus this connection Usui cannot teach specifically the limitation requiring that the pulse width modulation be "based on a comparison between video signals of the current field and video."

The Examiner respectfully disagrees. The Applicants are directed to column 4, lines 52-54 of Usui, which state in part, "signals with one of 16 pulse widths corresponding to the gray scale data are prepared by the signal drivers." This is just one example that illustrates the connection between the strength of pulse width modulation and the gray scale data. Usui operates in such a way that the larger the gray scale value the longer the pulse width that is applied to the signal drivers. From this it should be readily apparent how altering the gray scale data applied to the signal drives is equivalent to altering the strength of pulse width modulation. As shown above the previous Office action's rejection of the limitations as previously set forth in claim 8, are seen as proper and are thus maintained.

On pages 17-18, the Applicants traverse the rejection of claims 1-2, 6-7, 11, 14, and 17-19. Specifically, the Applicants again argue that there is no connection between adjusting the strength of pulse width modulation.

As noted above, the Examiner respectfully disagrees. Again, Usui accepts an input video signal that corresponds to a certain gray scale. This gray scale is compared to previous gray scales. Based on the comparison the gray scale that is applied to the panel is altered. As cited above, and in previous Office actions, Usui discloses clearly that each gray scale corresponds to a different pulse width modulation. Taking this disclosure it seems clear that in altering the gray scale applied to the panel, that the strength of modulation is also being altered. In short, the applied gray scale and the strength of pulse width modulation are directly related to each other. Each gray scale corresponds to a specific strength of pulse width modulation. As such the previously cited rejections of claims 11-2, 6-7, 11, 14, and 17-19 are seen as proper and are thus maintained.

On pages 18-21, the Applicants traverse the rejection of claims 1-2, 6-8, 11, 14 and 17-19 again. Specifically the Applicants argue that there is no motivation to combine Usui with Tomizawa.

From the arguments put forth by the Applicants it appears as though the combination of Usui and Tomizawa is still not clear. The Examiner has never claimed that the time division drive scheme of Usui is to in anyway be incorporated into display of Tomizawa. As the Applicants have correctly pointed out this would be repetitive and unnecessary upon viewing Tomizawa's amplitude modulation driving. Once again, it has never been the Examiner's stance that it would have been obvious to incorporate two driving methods into a single display panel.

Rather, the combination that is seen as obvious is the incorporation of Usui's teaching of adjusting a current field's gray scale data based on a comparison with a previous field's gray scale data into the display of Tomizawa. This adjustment and comparison is seen as being applicable to both the pulse width modulation driving of Usui and the amplitude modulation driving of Tomizawa. The motivation for introducing such a concept into the display of Tomizawa is to increase response speed, thereby allowing quick response and high image quality (Usui; col. 2, lines 1-13). As such the previously cited rejections of claims 1-2, 6-8, 11, 14, and 17-19 are seen as proper and are thus maintained.



BIPIN S. WALA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600